

REMARKS

Claims 1-25 are pending in the application, with claims 1-2, 6-12, and 15-16, standing ready for action on the merits, and with the remaining claims 3-5, 13-14 and 17-25 being withdrawn from consideration based on an earlier restriction requirement of the Examiner.

Restriction Requirement

Applicants affirm the election of claims 1-2, 6-12, and 15-16.

Claim Rejections Under 35 USC § 112

Claims 15-16 have been rejected under 35 USC 112, second paragraph as allegedly being indefinite. Reconsideration and withdraw of this rejection is requested based on the following considerations.

In 15-16, the resulting ink-jet recording medium has "multiple ink-receptive layers", because in step "b", it is recited that:

"b) forming a hot-melt extrudable tie composition comprising a polymer selected from the group consisting of polyurethane, ethylene-acrylic acid copolymer, ethylene-methacrylic acid copolymer, ethylene-acrylic acid-methacrylate terpolymer, poly(2-ethyl-2-oxazoline), and copolymers and mixtures thereof;"

This hot-melt extrudable tie composition is receptive to selected inks. Thus, there are two (2) ink-receptive layers in the

finished product. The co-extrusion process is described at page 11, lines 12-26 and Examples 8 and 9.

Claim Rejections Under 35 USC § 103(a)

Claims 1-2 and 6-12 have been rejected under 35 USC 103(a) over each of Robeson et al. (US 5,349,000) and Davis et al. (US 4,436,789). Reconsideration and withdraw of each of these rejections is respectfully requested based on the following considerations.

Referring to claims 1-2 and 6-12, the Robeson, et al. reference (US 5,349,000), appears to be directed to making a "PVOH composition containing a thermoplastic polyester polyether block copolymer which composition is readily melt-extrudable. The reference also provides extruded articles demonstrating good impact efficiency combined with melt stability." (See Col 2, lines 47 - 51). The "invention" of the Robeson '000 patent is directed to the goal of making bottles and bags (Col 1, lines 13 - 28).

As pointed out in the Robeson'000 patent, there are many known melt-extrudable blends and plasticized PVOH compositions. Some are listed in standard reference works as described in Col. 3, lines 15 - 37 thereof, which notes that poly(ethyl oxazoline) can be blended to make the material water soluble. That solubility presumably is related to the goal of enhancing the biodegradability of waste bags for shipboard waste (see Col 3, line 23).

However, the Robeson '000 patent does not disclose or suggest an ink-jet recording medium, wherein a composition is melt-extruded on a substrate to form a coated ink-receptive layer.

With respect to the cited Davis Patent (US 4,436,789), this patent addresses the inclusion of polyoxazolines in water-dispersions and the application of such water-dispersions as paper coating compositions. Among other components there can be a water-solution of polyvinyl alcohol (see Col 2, lines 60-61). The claims address aqueous dispersions and coating aqueous dispersions.

The current invention, by contrast, is directed to thermoplastic compositions, which are melt-extrudable as components of ink-jet recording media. Claim 1 in the instant application recites a melt-extrudable polyvinyl alcohol composition.

There are important differences between water-soluble polyvinyl alcohol and melt-extrudable polyvinyl alcohol (PVOH). The water-soluble PVOH used in other applications could degrade significantly if used with the methods of the instant invention and could suffer significant changes in properties.

As an aside, this is one reason why commercial companies have made large investments to produce and sell a wide range of PVOH materials in the market.

Moreover, ultimately, a non melt-extrudable PVOH material simply could not be used in applications of the current invention. Since the water-soluble PVOH materials used in other applications

are not melt-extrudable, they cannot be considered to disclose or suggest the methods and products of the instantly claimed invention.

Plainly, there is no motivation found in either of the cited art references of record to arrive at the instant invention as claimed. Absent such motivation in the cited art, the outstanding rejection under 35 USC 103(a) cannot be sustained.

CONCLUSION

Should there be any outstanding matters that need to be resolved in the present application, the Examiner is respectfully requested to contact John W. Bailey (Reg. No. 32,881) at the telephone number below, to conduct an interview in an effort to expedite prosecution in connection with the present application.

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to Deposit Account No. 02-2448 for any additional fees required under 37 C.F.R. §§ 1.16 or 1.17; particularly, extension of time fees.

Respectfully submitted,

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